

**Table 12.4 Carbon Dioxide Emissions From Energy Consumption for Manufacturing Industries, 1998**

NAICS <sup>2</sup> Code	Major Group	Carbon <sup>1</sup> Emissions (million metric tons carbon equivalent)					Carbon Intensity <sup>5</sup>
		Coal	Natural Gas	Petroleum	Net Electricity <sup>3</sup>	Other <sup>4</sup>	
311	Food .....	3.3	8.2	0.8	10.6	(s)	21.90
312	Beverage and Tobacco Products .....	0.7	0.6	0.1	1.2	0.0	24.91
313	Textile Mills .....	0.5	1.5	0.4	5.1	(s)	29.07
314	Textile Product Mills .....	0.1	0.4	Q	0.9	0.0	27.84
315	Apparel .....	(s)	0.3	0.1	0.9	0.0	27.67
316	Leather and Allied Products .....	0.0	0.1	(s)	0.1	0.0	25.79
321	Wood Products .....	0.1	1.1	0.3	3.6	0.1	9.93
322	Paper .....	7.0	8.4	4.1	11.9	0.2	11.54
323	Printing and Related Support .....	0.0	0.6	(s)	2.5	(s)	32.63
324	Petroleum and Coal Products .....	0.0	14.5	47.7	6.2	19.0	11.95
325	Chemicals .....	7.8	34.1	15.4	28.6	1.3	14.40
326	Plastics and Rubber Products .....	0.1	1.8	0.2	9.1	0.0	34.07
327	Nonmetallic Mineral Products .....	7.6	6.4	1.8	6.6	0.2	23.09
331	Primary Metals .....	25.8	13.4	0.9	27.0	1.0	26.62
332	Fabricated Metal Products .....	0.2	3.5	0.3	8.7	(s)	28.44
333	Machinery .....	0.2	1.4	0.1	4.8	0.1	30.06
334	Computer and Electronic Products .....	0.0	0.9	(s)	6.8	0.0	37.82
335	Electrical Equipment, Appliances, and Components .....	(s)	0.8	0.1	2.7	0.2	27.03
336	Transportation Equipment .....	0.8	3.1	0.5	9.7	0.1	28.52
337	Furniture and Related Products .....	0.1	0.4	(s)	1.5	(s)	22.52
339	Miscellaneous .....	0.0	0.6	0.1	2.0	0.0	29.63
—	Total Manufacturing .....	54.2	102.1	73.3	150.4	22.2	16.90

<sup>1</sup> Tons of carbon equivalent can be converted to tons of carbon dioxide gas by multiplying by 3.667. One ton of carbon equivalent = 3.667 tons of carbon dioxide gas.

<sup>2</sup> The Standard Industrial Classification (SIC) system has been replaced by the North American Industry Classification System (NAICS).

<sup>3</sup> "Net Electricity" is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, minus quantities sold and transferred out. It excludes electricity generated from combustible fuels.

<sup>4</sup> Includes all other types of energy that respondents indicated were consumed.

<sup>5</sup> Carbon Intensity is million metric tons of carbon per quadrillion Btu. In the carbon intensity calculations electricity was evaluated as site electricity, the electricity delivered to the end user. Site electricity is equal to 3,412 Btu per kilowatthour.

(s)=Less than 0.05 million metric tons. Q=Data withheld because the relative standard error was greater

than 50 percent.

Notes: • For prior surveys and the current Manufacturing Energy Consumption Survey, emissions are available classified under the old Standard Industrial Classification System. See the Web Page. • The estimates are for the first use of energy for heat and power and as feedstocks or raw material inputs. First use is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. • See Table 2.3 for manufacturing energy use. • Totals may not equal sum of components due to independent rounding.

Web Page: <http://www.eia.doe.gov/emeu/mecs>.

Sources: Energy Information Administration, Form EIA-846, "1998 Manufacturing Energy Consumption Survey," Form EIA-810, "Monthly Refinery Report" for 1998, and *Emissions of Greenhouse Gases in the United States 2000* (November 2001).